(16)

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATRAYANAPURA DIVISION

KODIGEHALLI SUB DIVISION

Name of the Work : **Drilling or borewell providing pipeline in ward no. 08, kodigehalli**

Estimated Cost : **16.00 Lakhs**

Head of Account : **P-1802 (2018-19)**

Job No. : **008-19-000160**

BRUHATH BANGALORE MAHANAGARA PALIKE

Yelahanka Zone, Kodigehalli Sub Division

Name of the work: **Drilling or borewell providing pipeline in ward no. 08, kodigehalli**

			Estimate Cost: Rs. 1600000.00						
Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction (P.47, I. 9.4) PRED.SR 2012-13								
	Basic Rate	1882.00							
	Area Weightage 3%	56.46							
	Total	1938.46							
		2				2.00	Each	1938.46	3876.92
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) Page no. 46 / I. 9.1 PRED SR 2012-13								
	Basic Rate	306.00							
	Area Weightage 3%	9.18							
	Total	315.18							
3	0 to 50 m	2	50.00			100.00	m	315.18	31518.00
4	Basic Rate	400.00							
	Area Weightage 3%	12.00							
	Total	412.00							
	50 to 100 m	2	50.00			100.00	m	412.00	41200.00
5	Basic Rate	445.00							
	Area Weightage 3%	13.35							
	Total	458.35							
	100 to 150 m	2	50.00			100.00	m	458.35	45835.00
6	Basic Rate	470.00							
	Area Weightage 3%	14.10							
	Total	484.10							
	150 to 200 m	2	50.00			100.00	m	484.10	48410.00
7	Basic Rate	544.00							
	Area Weightage 3%	16.32							
	Total	560.32							
	200 to 250 m	2	50.00			100.00	m	560.32	56032.00
8	Basic Rate	583.00							
	Area Weightage 3%	17.49							
	Total	600.49							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	251 to 300 m	2	50.00			100.00	m	600.49	60049.00
9	Basic Rate	622.00							
	Area Weightage 3%	18.66							
	Total	640.66							
	300 to 350 m	2	25.00			50.00	m	640.66	32033.00
10	Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end (including of all taxes) SE PRED III NO 84								
		2	54.00			108.00	Rmtr	1325.00	143100.00
11	Providing and fixing to wall, ceiling and floor unplasticised PVC 6.00 kgs/sqcm working pressure with pipe fittings, wall clips etc., and making good the wall, ceiling and floor for sanitary pipelines including cost of all materials, labour charges, HOM of acquirements and testing complete as per specifications. - 250mm dias. (Page No. 90 Item No. 12.116.5 PWD SR 2018-19)								
	Basic Rate	2052.00							
	Area Weightage 6%	123.12							
	Total	2175.12							
		2	9.00			18.00	Rmtr	2199.50	39591.00
	Basic rate	2075.00							
	6% AW	124.50							
	Sub Total	2199.50							
12	Providing MS Casing pipe collars page no III it no 86 pred 12-13 sr								
		2	10.00			20.00	no	150.00	3000.00
13	Providing 175mm dia ms casing cap page no III it no 85 pred 12-13 sr								
		2				2.00	no	100.00	200.00
14	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings. (Sl No. 49, Page No. XLII, 2018-19)								
	17.5 HP 30 Stage	2				2.00	Unit	72126.00	144252.00
15	KSRB13-3.1: Providing and fixing to wall celling and floor glavanised/ mild steel tubes (medium grade 1.27 kg /mt) B class 50 mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. (Page 92, Item No. 13.6, PWDSR 2018-19)								
	Basic rate	512.00							
	6% AW	30.72							
	Sub Total	542.72							
		2	300.00			600.00	Mtr	542.72	325632.00

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
16	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and Powder coated extrued PVC sheathed suitable for working voltage upto 1100 Volts as per IS - 694 ; 1990 AND CONFORMING TO gtp OFGROUP A P. No. 12/ I No. (2.10.4) 3cx 6.0 Sqm KPWD Electrical SR 2014-15								
		2	580.00			1160.00	Mtr	188.70	218892.00
17	Labour charges for erection of new/ repaired submersible pumpset along with gi pipes inculding transportion each length pno 558 ino 3 bwssb sr 14-15								
		2	50.00			100	No	88.00	8800.00
18	Supplying and flush polished wood board with out front frount plank made of not less than 15mm thick plank after due groove cutting Finishing with necessary on fixing the same to the wall using tapered inverted wooden plugs screws etc., P No. 44No.6.6.6 KPWD Electrical SR 2014-15								
	20x20x2.5	2				2	Each	302.00	604.00
19	Supplying of 1.1 KV LT UG cable having aluminium condutor PVC insulated shethed, EXTREDED INNER SHEATHRD galvnised steel,stirp confirming IS 3975;1990 AND extruded PVC outer sheathing armoured cable IS 1554 part 1;1998 and confirming to GTP of group.P No.55/ I No.7.4.4 (4 core 16 Sqmm) KPWD Electrical SR 2014-15								
		2	35.00			70.00	Mtr	140.40	9828.00
20	Labour charges for laying of 1.1 K.V class UG cable, P No. 61 / I No. 7.8.1 In existing trencg/duct 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15								
		2	35.00			70.00	Mtr	10.80	756.00
21	Digging or trenching of 0.6m deep x 0.5 mtr wide refilling the trench to the required ground level and consolidating etc., completeP No. 62/ I. No.7.9.4 KPWD Electrical SR 2014-15								
	For Cutting Road Surface aspalt	2	30.00			60.00	Mtr	117.00	7020.00
22	Supplying and fixing of Class A (meaium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class P. No. 62/ I No.7.12.1 KPWD Electrical SR 2014-15								
	40mm dia GI pipe	2	3.00			6.00	Mtr	345.00	2070.00
23	Supplying and fixing L.T. cast Iron pot head suitable for 1.1 KV class UG cable filled with necessary bituumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., P. No.62/ I No. 7.13.2 KPWD Electrical SR 2014-15								
	16Sqmm	2				2.00	NO	280.00	560.00
24	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C cutouts and other equipments on the meter board using 40 mm dia 2.90 mm thick GI pipe 2.5 m long buried in a pit. The pit should be filled with equal propotion of solt and charocoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size, as per ISI specification 7.3.3 IS 732 using 12 mm dia bolts, nuts, washers and check nuts, etc., the pipe shall have 16 throught holes of 122 mm dia, (P No.55, I No. 7.1) KPWD Electrical SR 2014-15								
		2				2	NO	2727.00	5454.00

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
25	Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., complete.... P No44/I No 6.7.4 KPWD Electrical SR 2014-15								
	100 Amps								
		2	3			6	Each	360.00	2160.00
26	Supplying and fixing of heavy duty glands for ug cable 1.1 kv etc., complete.... P No62 I No 7.14.2 KPWD Electrical SR 2014-15								
	25mm dia								
		2	6			12	Each	86.00	1032.00
27	Supplying and fixing miniature circuit breakers/solaters on existing MCB distribution boards using necessary fixing materiasl wiring complete as requireds 5 to 32 amps triple pole with all lead and lift, loading, unloading and labour charges etc complete as per specifications pno 47 IT 6.16.5 KPWD Electrical SR 2014-15								
		2				2	Each	1547.00	3094.00
28	Fabrication supplying and mounting MS box of 16 SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm @ Rs.0.33 P.No. 49, I. No.6.40.2 KPWD Electrical SR 2014-15								
	16SWG	4	220.00	60.00		52800			
		2	450.00	25.00		22500			
						75300	Sq.Cm	0.33	24849.00
29	KSRB 13-7.1-4: Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 (Page No.95 Item No. 13.55 PWD SR 2018-19)								
	Basic rate	1330.00							
	6% AW	79.80							
	Sub Total	1409.80							
		2				2	NOS	1409.80	2819.60
30	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete. (P. No.97, I. No. 13.81.3 PWD SR 2018-19)								
	Basic rate	210.00							
	6% AW	12.60							
	Sub Total	222.60							
	50mm dia	2	2.00			4	NOS	222.60	890.40
31	Gate value 50 mm nominal bore gun metal (P. No.XXVI Sl No. 661 PWD SR 2018-19)								
	50mm dia	2	3.00			6	NOS	1398.31	8389.86

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
32	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. PRED Bangalore Circle SE Approved Date 30.07.2010 15HP to 30 HP Star Delta Starter								
		2				2	NO	10000.00	20000.00
33	Earth work excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches, 1.5m and above in width, in ordinary soil, exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with all lead upto 50m after breaking of clods complete as per specifications.(P.No.6, I.No.2.1 PWD SR 2018-19)								
	Basic rate	249.00							
	6% AW	14.94							
	Sub Total	263.94							
		2	45.00	0.60	0.75	40.50			
						40.50	cum	263.94	10690.00
34	Providing and filling sand in foundation to required depth for sub soil treatment including watering, ramming with all lead and lift complete as per specifications. (PWDSR 2018-19, P. 7, I. 2.13)								
	Basic rate	2060.00							
	6% AW	123.60							
	Sub Total	2183.60							
		2	45.00	0.60	0.15	8.10			
						8.10	cum	2183.60	17687.00
35	KSRB13-9.3 : Providing and fixing to wall, ceiling and floor high density polyethylene pipes 6.00 kgf/sq.cm working pressure 50mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.15.2 / 13.9 (Page no.96, Item No.13.73.1 PWD SR 2018-19)								
		2	45.00			90.00			
	Basic Rate	235.00							
	Area Weightage @ 6%	14.10				90.00	Rmtr	249.10	22419.00
	Total	249.10							
36	KSRB 2-4 : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications. (Page No.6, Item No. 2.11) PWD SR 2016-17								
	Basic rate	76.00							
	6% AW	4.56							
	Sub Total	80.56							
	From Pipe line excavation					40.50			
	Deduct from item no. 33					-8.10			
						32.40	cum	80.56	2610.00

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
37	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications (Page No. 155, Item No. 20.18, PWD SR 2018-19)								
		2	45.0	0.60	0.150	8.10			
						8.10	cum	2001.28	16210.00
	Basic Rate	1888.00							
	Area Weightage @ 6%	113.28							
	Total	2001.28							
38	KSRRB 500-1.1 : Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire bushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries, curing complete as per specifications. Specification No. 500-1.3 (Page No. 158, I. 21.1, PWDSR 2018-19)								
		2	45.0	0.60		54.00			
						54.00	sqm	22.26	1202.00
	Basic Rate	21.00							
	Area Weightage @ 6%	1.26							
	Total	22.26							
39	KSRRB M500-6: Providing and applying primer coat for surfaces of medium porosity like cement stabilized soil base @ 1.10 Kg/Sqmt over prepared surface with S.S bitumen emulsion using bitumen tanker fitted with spray set (excluding cleaning of road surface) including cost of all material, labour HOM of machineries complete as per specifications. MORTH specification NO. 502 (Page No. 158, Item No. 21.5, PWD SR 2018-19)								
	Qty vide item No. 37	1				54.00			
						54.00	sqm	46.64	2519.00
	Basic Rate	44.00							
	Area Weightage @ 6%	2.64							
	Total	46.64							
40	KSRRB M500-18: Providing and laying bituminous macaduam on prepared surface using crushed aggregates as per design mix formula for base/binding course including loading of aggregates with FE loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, but excluding cost of primer / tack coat including lead, lift and cost of all materials, labour, HOM of machineries complete as per specifications. Using 40-60 TPH capacity HMP with mechanical paver grading II (50-75mm) with 3.4% VG-30 bitumen. (Page No. 159, Item No. 21.11.6, PWD SR 2018-19)								
	cross road length	2	45.0	0.60	0.05	2.70			
						2.70	cum	6172.38	16665.00
	Basic Rate	5823.00							
	Area Weightage @ 6%	349.38							
	Total	6172.38							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
41	KSRRB M500-18: Providing and laying semi dense bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specifications clause No. 508 complete in all respects as per specifications. using 40-60 TPH capacity HMP with mechanical paver grading I (35-40mm) with 4.5% VG-30 Bitumen (Page No. 160, Item No. 21.20.5, PWD SR 2018-19)								
	cross road length	2	45.0	0.60	0.04	2.16			
						2.16	cum	7717.86	16671.00
	Basic Rate	7281.00							
	Area Weightage @ 6%	436.86							
	Total	7717.86							
42	BESCOM Deposit	L/S	2				2	13000.00	26000.00
43	Sub Total-1								**1424621.0**
44	Add GST charges @ 12%								170955.0
45	Miscellaneous & Rounding off							L/S	4424.00
	Total Rs								**1600000.00**
	Rupees Sixteen Lakhs Only								

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D S.R of 2018-19
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.
5 **This work has not been taken previously under any other grant.**

Assistant Engineer
Ward no. 08
Kodigehalli

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP

Executive Engineer
Byatrayanapura Division
BBMP
25/07

Administrative Approval

Accorded For ...Rs...
Head of A/C.....
CER NO :...82..... Dt:..25.07.19

TA

CE (YNK)

TECHNICAL SANCTION
Accorded For Rs. Sixteen lakhs only
Head of A/c. P-1771
Div. Ref. No. 80 Date. 25.07.2019
AE
EE(BTP) 25/07